

Further objects of the invention provide such methods and apparatus as facilitate access to multiple storage devices, e.g., of varied types, from a plurality of servers or other host digital data processors, e.g., running a variety of platforms.

- 5 Still further objects of the invention are to provide such methods and apparatus for managing administrator-defined and other policies for storage networks, e.g., to facilitate access by multiple hosts to multiple storage devices in a manner consistent with network administrators' wishes and without risk of unwanted access conflicts.

- 10 Yet still further objects of the invention are to provide such methods and apparatus as facilitate the persistence of status and other data pertaining to storage area networks regardless of the metaphors under which that data is used and/or stored (e.g., object-oriented, relational, and so forth).

- 15 Another object of the invention is to provide such methods and apparatus as facilitate automated handling of events that occur with respect to storage area networks and their componentry.

Yet other objects of the invention are to provide such methods and apparatus as facilitate visual representation of the storage area network topology, componentry and status.

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Still yet another object of the invention is to provide such methods and apparatus as facilitate administrator (or other operator) definition of storage area network policy (e.g., vis-à-vis

assignment of storage devices to hosts) and as facilitate notification of events occurring with respect thereto.

These and other objects of the invention are evident in the drawings and in the description that

5 follow.

TO: "T.E. 2660"

## Summary of the Invention

### *LUN Management*

5 The foregoing are among the objects attained by the invention which provides, in one aspect, novel storage area networks (SANs) and methods of operation thereof. For example, in one aspect, the invention provides improvements on a SAN of the type having a plurality of hosts coupled via a network or other interconnect with one or more storage units. The improvement, according to this aspect of the invention, comprises a manager process, device or other  
10 functionality in communication with a plurality of agent processes, devices or other functionality, each of which is associated with a host. The agents identify attributes of (i) their associated hosts, (ii) the interconnect (or portion thereof) to which that host is coupled, and/or (iii) storage units to which that host is coupled via the interconnect. The manager responds to these attributes identified by the agents to manage the SAN.

15 The manager according to related aspects of the invention can be implemented on a first digital data processor, while the hosts are implemented on further digital data processors. These digital data processors can be coupled via a first network, e.g., an IP or other network, to support communications between the manager and the agents. Such communications can be further  
20 effected, according to one aspect of the invention, utilizing an object request broker (ORB). The interconnect, according to further related aspects of the invention, comprises a second network, e.g., SCSI and/or fiber channel based fabric, separate from the first network.